

Application No. 10/727,246
March 30, 2006
Amendment responsive to Office Action of December 30, 2006

In the Claims:

Please amend the claims as Indicated below:

1-21.(cancelled)

22.(currently amended) A latch assembly control method, comprising the steps of:

integrating a latch assembly with a motor having at least one gear thereof for actuating a plurality of components of said latch assembly wherein each one of said at least one gear has a multiplicity of gearteeth; and

associating a geartooth sensor with said latch assembly, wherein said geartooth sensor senses the movement of at least one of said gearteeth to thereby sense a position of said at least one gear, wherein said at least one gear completes less than one revolution.

23.(previously presented) The method of claim 22 further comprising the step of configuring said geartooth sensor to comprises at least one magnet located proximate to said at least one gear of said motor.

24.(previously presented) The method of claim 22 further comprising the step of providing the latch assembly in a vehicle door.

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25.(previously presented) The method of claim 22 further comprising the step of integrating said geartooth sensor with said latch assembly.

26.(previously presented) The method of claim 22 further comprising the step of providing a vehicle management module which communicates with said door latch assembly for control of said vehicle door latch assembly, including said motor and said at least one gear thereof.

27.(currently amended) The method of claim 26 further comprising the step of communicating data from said geartooth sensor, wherein said is data indicative of a known reference point associated with said at least one gear ~~for calibration thereof~~.

28.(currently amended) The method of claim 22 further comprising the step of ~~calibrating~~controlling via a vehicle management module, at least one component of said door latch assembly based on ~~the data collected from said geartooth sensor~~.

29.(previously presented) The method of claim 22 further comprising the step of providing a plurality of geartooth sensors for collecting position data associated with said at least one gear.

2030.(currently amended) The method of claim 26 27 further comprising the step of actuating at least one component of said door latch assembly utilizing said vehicle management module based on data collected from a plurality of geartooth sensors.

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31.(currently amended) The method of claim 26 27 further comprising the step of actuating at least one component of said door latch assembly utilizing said vehicle management module based on data collected from said at least one geartooth sensor.

32.(previously presented) A latch assembly control system, comprising:

a latch assembly integrated with a motor having at least one gear thereof for actuating a plurality of components of said latch assembly wherein each one of said at least one gear has a multiplicity of gearteeth; and

a gearnose sensor associated with said latch assembly, wherein said gearnose sensor senses the movement of at least one of said gearteeth to thereby sense a position of said at least one gear, and wherein said at least one gear completes less than one revolution.

33.(previously presented) The system of claim 32 wherein said gearnose sensor comprises at least one magnet located proximate to said at least one gear of said motor.

34.(currently amended) The system of claim 32 wherein said latch assembly comprises a vehicle door latch assembly.

35.(previously presented) The system of claim 32 wherein said gearnose sensor is integrated with said latch assembly.

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36.(previously presented) The system of claim 32 further comprising a vehicle management module which communicates with said door latch assembly for control of said vehicle door latch assembly, including said motor and said at least one gear thereof.

37.(currently amended) The system of claim 36 wherein said geartooth sensor communicates data indicative of a known reference point associated with said at least one gear ~~for calibration thereof~~.

38.(currently amended) The system of claim 36 37 wherein said vehicle management module ~~calibrates~~controls at least one component of said door latch assembly based on the data collected from said geartooth sensor.

39.(previously presented) The system of claim 32 further comprising a plurality of geartooth sensors for collecting position data associated with said at least one gear.

40.(previously presented) The system of claim 36 wherein said vehicle management module actuates at least one component of said door latch assembly based on data collected from said plurality of geartooth sensor.

41.(previously presented) A latch assembly control system, comprising:

a latch assembly integrated with a motor having at least one gear thereof for actuating a plurality of components of said latch assembly wherein each one of said at least one gear has a multiplicity of gearteeth; and

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a geartooth sensor associated with said latch assembly, wherein said geartooth sensor senses the movement of at least one of said gearteeth to thereby sense a position of said at least one gear, and wherein said at least one gear completes less than one revolution to thereby provide a known reference point registration via at least one signal generated by said geartooth sensor; and

a vehicle management module which communicates with said door latch assembly for control of said vehicle door latch assembly, including said motor and said at least one gear thereof, wherein said vehicle management module actuates at least one component of said door latch assembly based on at least one signal generated by said at least one geartooth sensor.